



## RAILROAD COMMISSION OF TEXAS

### OIL AND GAS DIVISION

#### PERMIT TO RECEIVE, STORE, HANDLE, TREAT AND DISPOSE OF CERTAIN NONHAZARDOUS OIL AND GAS WASTES

**Permit Nos. STF-0149, P012803A,  
P012803B, P012803C and P012803D**

MCBRIDE OPERATING LLC  
4010 WATER VIEW DR  
LONGVIEW TX 75605

Based on information contained in the initial application, received on March 21, 2019, and subsequent information received to date, you are hereby authorized to receive, store, handle, treat and dispose of certain non-hazardous oil and gas wastes as described in the permit application and as specified below at the following facility:

**Commercial Stationary Treatment Facility**  
McBride Waskom Waste Separation STF Facility  
Latitude and Longitude: 32.490833°, -94.136667°  
Harrison County, Texas  
RRC District 06, Kilgore

#### NARRATIVE DESCRIPTION OF PROCESS:

Incoming oil and gas wastes are offloaded into the Collecting/Washout Pit (P012803A) and gravity drain through a conduit into the Collecting/Separation Pit (P012803B). As waste flows into the Collecting/Separation Pit, a shale shaker separates the coarse solid fraction and liquid fraction. The solid fraction is conveyed to the Collecting/Drying Pit (P012803C) for further stabilization by evaporation and inert material additives, and the liquid fraction gravity drains into a frac tank located within the Collecting/Mixing Pit (P012803D). Incoming solid materials may be offloaded directly into the Collecting/Drying Pit (P012803C). After stabilization, the solid fraction is transported offsite for disposal at an authorized facility, and the liquid fraction is disposed of in an onsite Class II injection well.

Authority is granted by the Railroad Commission of Texas (RRC) to receive, store, handle, treat, and dispose of oil and gas wastes in accordance with Texas Administrative Code (TAC) Title 16, Part 1, Chapter 3.8 (Statewide Rule 8), and is subject to the following minimum conditions:

#### I. GENERAL PERMIT CONDITIONS

- A. This effective date of this permit is July 30, 2019 and expires on July 29, 2024.
- B. The permittee may not receive, store, handle, treat or dispose of oil and gas wastes or fluids at the facility until financial security in the amount of \$147,798 is provided and approved by the RRC from the reference location. This amount provides financial security for the RRC permitted Waste Storage and Treatment Units described below.

- C. In accordance with 16 TAC § 3.78 the permittee must maintain financial security in the amount of **\$147,798**, until this facility, including all associated pits, has been closed in accordance with this permit and all of the referenced equipment and storage tanks have been emptied and removed. Technical Permitting reserves the right to revise this amount, as necessary. Prior to any modification of this facility that would require increased financial security, an updated closure cost estimate must be submitted to Technical Permitting in Austin, and any additional financial security must be filed with and approved by the RRC prior to making this modification.
- D. No waste may be received at the referenced facility until the soil borings have been completed and the groundwater monitoring wells (if necessary) required by Permit Condition VI. of this permit have been completed, developed and sampled. The documentation required by Permit Conditions VI.A., VI.B. and VI.C. must be provided to and approved by Technical Permitting within 30 days after completion of the soil borings and installation of groundwater monitoring wells.
- E. A copy of the site-specific Spill Control Plan that details means and methods of waste management and containment in the event of a release or discharge must be maintained on-site and made available to RRC staff upon request.
- F. The facility's Stormwater Management Plan must be maintained on-site and made available upon request of the RRC.
- G. This permit does not authorize the discharge from the facility of any oil and gas waste, including contaminated or contact stormwater.
- H. The permittee may not receive, store, handle, treat or dispose of oil and gas waste at the facility until all necessary air permits or exemptions (if any) are obtained from the Texas Commission on Environmental Quality (TCEQ).
- I. Technical Permitting in Austin and the Kilgore District Office must be notified in writing upon final completion of construction of the facility. The permittee may not begin receiving, storing, handling, treating or disposing of oil and gas waste until the appropriate District Office has performed its inspection of the completed facility and has verified that the facility is constructed in accordance with the application and this permit.
- J. Technical Permitting in Austin and the Kilgore District Office must be notified in writing when construction of the facility is initiated.
- K. Unless otherwise required by conditions of this permit, construction, use, and maintenance of the facility must be in accordance with the information represented in the permit application and attachments thereto. When construction of the facility is completed, submit the "*as-built*" plans to be incorporated as part of the permit application.
- L. An On-Site Sewage Facility (OSSF) may be constructed, operated, and maintained within the boundaries of the subject facility without an additional permit from the Commission if: (1) the OSSF waste is not commingled with any other oil and gas waste; (2) the system is designed by a Professional Engineer registered in the state of Texas or a sewage system installer licensed in the state of Texas; and (3) the construction, operation, and maintenance of the OSSF complies with all applicable local, county, and state requirements.
- M. Any deviation from this permit must be approved by amendment from Technical Permitting in Austin before implementation.

- N. Any soil additives, stabilizers, bioaccelerators or treatment chemicals must be approved by Technical Permitting prior to use at the facility.
- O. Safety Data Sheets (SDS) must be submitted to Technical Permitting in Austin for any chemical or compound proposed to be used in the treatment of waste at the facility. Use of the compound is contingent on RRC approval. All chemicals must be stored according to the manufacturer's recommendations.
- P. All chemical laboratory analyses required to be performed in accordance with this permit must be performed using appropriate Environmental Protection Agency (EPA) methods or Standard Methods by an independent, National Environmental Laboratory Accreditation Program (NELAP) certified laboratory neither owned nor operated by the permittee. Any sample collected for laboratory analysis must be collected and preserved in a manner appropriate for that analytical method as specified by 40 CFR, Part 136. All geotechnical testing is to be performed utilizing tests standardized by the American Society for Testing and Materials (ASTM) and certified by a Texas licensed Professional Engineer.
- Q. The permittee must make all records required by this permit available for review and/or copying during normal business hours upon request of RRC personnel.
- R. This permit may be considered for administrative renewal upon review by the RRC. Any application for renewal should be received at least **60 days prior** to the permit expiration date.
- S. This permit is **not transferable** without the consent of the RRC. Any request for transfer of this permit must be filed with Technical Permitting at least **60 days before** the permittee wishes the transfer to take place.
- T. The permittee must submit a **Quarterly Report** in accordance with the following:
  - 1. The report must contain applicable information as required in Permit Conditions III.G., IV.K., V.G. and VI.C.8.
  - 2. The quarterly reporting periods must be January 1 through March 31, April 1 through June 30, July 1 through September 30, and October 1 through December 31 of each year.
  - 3. The reports must be submitted to Technical Permitting in Austin and the appropriate District Office no later than the 30th day of the month following each reporting period, or each April 30th, July 30th, October 30th, and January 30th, respectively.
  - 4. An Executive Summary must be included that describes facility operations and relevant activities that occurred during the specific quarter.
  - 5. Data tables presenting volumes or amounts of waste received, treated, and disposed of must be included.
  - 6. Laboratory analytical reports, the corresponding chain of custody, and other relevant data must be included.
- U. Failure to comply with any provision of this permit or any determination by the RRC that this permit is being abused will be cause for enforcement action including, but not limiting to, modification, suspension, or termination of this permit in accordance with Statewide Rule 8(d)(6)(E).

## II. AUTHORIZED WASTES

- A. Only oil and gas wastes subject to the jurisdiction of the RRC that are exempt and non-hazardous according to Subtitle C (Resource Conservation and Recovery Act (RCRA)) may be received, stored, treated, processed, or disposed of at this facility. You may receive, store, handle, treat and dispose of only the following oil and gas wastes:
  - 1. Water based drilling fluids and associated cuttings
  - 2. Oil based drilling fluids and associated cuttings
  - 3. Contaminated soils from crude oil and condensate spills, pipeline and saltwater spills
  - 4. Hydraulic fracturing flow-back water and associated solids including sand
  - 5. Formation sands and other solids from saltwater storage tanks or vessels and saltwater pits
  - 6. Tank bottoms from gas plants, crude oil Reclamation Plants, crude oil separation facilities, and crude oil production facilities, which do not exceed 7% in oil content as determined by Standard American Petroleum Institute (API) "shake out" test.
  - 7. Other non-hazardous wastes generated in association with the exploration, development and production of oil and gas resources subject to the jurisdiction of the RRC
- B. No other waste may be disposed of at the facility without written authorization from the RRC.
- C. RCRA **non-exempt** wastes under the jurisdiction of the RRC may only be accepted and processed at the facility if analytical results demonstrate that the waste is characteristically nonhazardous. See Permit Condition III.D.
- D. No oil and gas Naturally Occurring Radioactive Material (NORM) waste as defined in 16 TAC, §4.603, or waste from a facility that is licensed by the Texas Department of State Health Services to handle, process or treat oil and gas NORM waste, may be received at this facility.
- E. No asbestos-containing material regulated under the Clean Air Act or polychlorinated biphenyl (PCB)-containing material regulated under the Toxic Substances Control Act may be accepted for processing at the facility.
- F. All waste haulers received at the facility must be RRC permitted Oil and Gas Waste Haulers and must have the subject facility listed as an authorized disposal facility on their "*Oil and Gas Waste Hauler's Authority to use Approved Disposal/Injection System*", (Form WH-3).

## III. WASTE TESTING AND RECORD KEEPING REQUIREMENTS

- A. For the purposes of this permit a representative sample of incoming waste is defined as a composite sample composed of four grab samples from each 50 cubic yards of waste material from each job (e.g., from each well, pit, spill location).
- B. Each load of incoming waste, other than water-based drilling fluids and associated cuttings, or oil-based drilling fluid and associated cuttings, must be scanned for the presence of NORM using a scintillation meter with a sodium iodide detector or other equivalent devices that comply with 25 TAC 289.259, Texas Regulations for Control of Radiation (TRCR Part 46). Manufacturer's specifications must be submitted to Technical

Permitting for equivalent devices used for NORM detection. All instrument calibration records must be maintained onsite and made available upon request. Any load with a reading of 50 microroentgens per hour or greater may not be unloaded or processed at the facility unless further analysis of the waste demonstrates that the waste does not exceed 30 picocuries per gram of Radium-226 **combined with** Radium-228, or 150 picocuries per gram of any other radionuclide.

- C. **Prior** to receipt at the site, representative samples of waste from **commercial** oil and gas facilities and Reclamation Plants must be analyzed for either of the parameters listed below and may not exceed the limitation for the respective parameters:

<u>PARAMETER</u>	<u>LIMITATION</u>
Total Organic Halides (TOX) (EPA Method 9020B)	100 mg/L
<b>or</b>	
Extractable Organic Halides (EOX) (EPA Method 9023)	100 mg/kg

Special authorization for receipt of waste with an EOX/TOX >100 parts per million may be considered. Authority must be obtained from Technical Permitting in Austin prior to acceptance of the waste.

- D. **Prior** to receipt at the site, representative samples of incoming RCRA **non-exempt** waste or **international** waste must be analyzed for the following parameters and may not exceed the specified limitations:

<u>PARAMETER</u>	<u>LIMITATION</u>
Corrosivity (EPA method 1110A/ 9040C or equivalent)	2.0 – 12.5 standard units (s.u.)
Reactivity	No materials exhibiting the characteristics of reactivity as defined by RCRA
Ignitability (EPA method 1010A/ 1020B/ 1030A)	Flash point < 60° C or 140°F
Toxicity (EPA Method 1311)	No materials exhibiting the characteristics of toxicity as defined by RCRA
Metals: Toxic Characteristic Leaching Procedure (TCLP) (EPA Method 1311/6010/6020/7147A)	
Arsenic	< 5.0 mg/L
Barium	< 100.0 mg/L
Cadmium	< 1.0 mg/L
Chromium	< 5.0 mg/L
Lead	< 5.0 mg/L
Mercury	< 0.2 mg/L
Selenium	< 1.0 mg/L

<u>PARAMETER</u>	<u>LIMITATION</u>
Silver	< 5.0 mg/L
Benzene ( <i>EPA Method 1311/ 8260B/ 8021</i> )	< 0.5 mg/L

E. The permittee must maintain the following records on each load of waste **received** at the facility for a period of three (3) years from the date of receipt:

1. Description of the site where the waste was generated, including:
  - a. Generator name;
  - b. Lease name and number and well number(s), or gas ID number(s), or API well number(s); or latitude and longitude coordinates in decimal degrees if waste was not generated on a lease; and
  - c. County
2. Name and RRC permit number of the transporter
3. Volume of waste material (specify units)
4. Detailed description of the type of waste, including any analysis required by Permit Conditions III.B., III.C., and III.D. above

F. The permittee must maintain the following records on each load of waste **removed** from the facility for a period of three (3) years from the date of receipt:

1. Date waste is removed and hauled to a disposal facility
2. Name and RRC permit number of the transporter
3. Volume (specify units) of each shipment of waste hauled to a disposal facility
4. Type of waste (basic sediment, water, water-based mud, etc.)
5. Name and permit number of the facility

G. A report must be submitted to Technical Permitting in Austin and the Kilgore District Office as part of the **Quarterly Report** required in Permit Condition I.T. and must include the following information:

1. A table summarizing all incoming waste, including the following:
  - a. Generator name
  - b. Lease name and number and well number(s), or gas ID number(s), or American Petroleum Institute (API) well number(s); or latitude and longitude coordinates in decimal degrees if the waste was not generated on a lease
  - c. County
  - d. Name and RRC permit number(s) of the transporter(s)
  - e. Description and **total volume** (specify units) of waste from each job (for which Permit Conditions III.E.1.a, III.E.1.b., and III.E.1.c are the same)
  - f. The total volume of each type of waste material received during the quarter
2. A table summarizing all waste removed from the facility, including the following:
  - a. Name and permit number of the disposal facility

- b. Name and RRC permit number(s) of the transporter(s)
  - c. Description and **total volume** (specify units) of waste hauled to the disposal facility
  - d. The total volume of each type of waste that leaves the facility for disposal or final disposition during the quarter
3. Copies of all analyses required by Permit Conditions III.B., III.C., and III.D. above

#### IV. GENERAL FACILITY DESIGN AND MAINTENANCE REQUIREMENTS

- A. The general layout and arrangement of the facility must be consistent with the "*SOIL BORING LOCATION MAP*" and "*FACILITY CROSS SECTION*" diagrams, received on May 7, 2019, which are attached as **Permit Appendix A**.
- B. A sign must be posted at each entrance to the facility. The sign must be readily visible and show the operator name, facility name, and permit number in letters and numerals at least three inches in height.
- C. The entire facility must consist of and is defined by the following waste management unit designations:
  1. Tank Battery:
    - a. One (1) 1000 bbl Gunbarrel Tank
    - b. One (1) 400 bbl Skim Oil Tank
    - c. Six (6) 400 bbl Saltwater Tanks
  2. One (1) Collecting/Washout Pit (**P012803A**)
  3. One (1) Collecting/Separation Pit (**P012803B**)
  4. One (1) Collecting/Drying Pit (**P012803C**)
  5. One (1) Collecting/Mixing Pit (**P012803D**)
    - a. One (1) 500 bbl Frac Tank (Staged on the Collecting/Mixing Pit (**P012803D**))
- D. No waste, treated or untreated, may be directly placed on the ground.
- E. All storage tanks, equipment and roll-off boxes must be maintained in a leak-free condition. If inspection of a tank, roll-off box or storage vessel reveals deterioration or leaks, it must be repaired or replaced before resuming use of the vessel.
- F. Any spill of waste, chemicals, or any other waste related material must be collected and containerized within 24 hours and conveyed through the treatment process or disposed of in an authorized manner.
- G. Any chemical used in the treatment process must be stored in vessels designed for the safe storage of that particular compound and these vessels must be maintained in a leak free condition.
- H. Dikes or containment structures must be constructed around all waste management units. All earthen dikes surrounding pits and constructed as perimeter berms must be compacted or constructed of material that meets 95% Standard Proctor (ASTM D698) or 90-92% Modified Proctor (ASTM D1557) density and meet a permeability of  $1 \times 10^{-7}$  cm/sec or less when compacted. During construction, successive lifts should not exceed

nine inches in thickness, and the surface between lifts should be scarified to achieve a good seal. Each berm must maintain a slope no steeper than a one to three (vertical to horizontal) ratio, unless constructed of concrete or equivalent material (firewalls). These structures must be used to divert non-contact storm water around the waste management areas and contain and isolate contact storm water within the waste management units. Refer to the Stormwater Management requirements specified in Permit Condition VII.

- I. The facility must maintain security to prevent unauthorized access. Access must be secured by a 24-hour attendant or a six-foot-high security fence and locked gate when unattended. Fencing is required unless terrain or vegetation prevents truck or livestock access except through entrances with lockable gates.
- J. No oil may be allowed to accumulate on top of the water or wastes stored in the pits. Any oil on top of any waste liquids must be skimmed off and handled in accordance with RRC rules. Any recovered oil must be recorded and filed as either a Skim Oil/Condensate Report (Form P-18) or a "Letter of Authority Request for Oil Movement" (Form T-1) Letter:
  1. A Skim Oil/Condensate Report (Form P-18) must be filed with the RRC every month to record skim oil volumes recovered and sold during the operation of this facility. If no skim oil is recovered for a given month, a (Form P-18) should still be filed with the RRC.

**OR**

2. An original signed "*Letter of Authority Request for Oil Movement*" (Form T-1) must initially be submitted on letterhead to Field Operations, Austin, TX, Oil and Gas Division, for every event in which sellable skim oil is recovered and intended to be sold during the operation of this facility. Filing frequency requirements may be redefined after the initial oil movement request has been processed. The request must include:
  - a. The time period for which oil movement authority is requested.
  - b. The name of the applicant requesting to move the oil.
  - c. Volume (barrels) of oil to be moved.
  - d. Name and location of the facility which oil will be moved.
  - e. Name, address, telephone, and fax number of facility buying the oil to be moved.
  - f. Contact person, T-1 permit number, and P-5 Operator Number of the oil buyer.
  - g. A description of the source(s) of the oil at the facility.
- K. Each month an integrity inspection of the entire facility must be performed on all concrete slabs, processing equipment, dikes, firewalls or berms, and aboveground storage tanks for deterioration, leaks and spills. The records of each inspection must be kept on-site and maintained for a period of three (3) years from the date of the inspection. The following must be included in the inspection report and submitted as part of the **Quarterly Report** required by Permit Condition I.T.
  1. The results of the monthly inspection of concrete slabs within the facility for evidence of deterioration, leakage, or lack of structural integrity, and a description of corrective action taken, if any.



2. The results of the monthly inspection of process equipment, tanks, and roll-off boxes for evidence of deterioration or leakage, and a description of corrective action taken, if any.
3. The results of the monthly inspection of waste levels within the storage areas, tanks, and roll-off boxes, and a description of corrective action taken, if any.
4. The results of the monthly inspections of the erosion structures to control and modulate run-off to surface waters and indicate whether debris has been removed.

**V. THE COLLECTING/WASHOUT PIT (P012803A), THE COLLECTING/SEPARATION PIT (P012803B), THE COLLECTING/DRYING PIT (P012803C) AND THE COLLECTING/MIXING PIT (P012803D) CONSTRUCTION AND OPERATION**

- A. A sign must be posted at each pit identifying each pit permit number in letters and numerals at least three inches in height.
- B. At least two (2) feet of freeboard must be maintained between the fluid level in the pits and the top of the pit walls.
- C. Liquid waste accumulated within the pits must be removed as needed to maintain freeboard and disposed of in an authorized Class II injection well.
- D. The outflow pipes that allow waste to flow between the pits must be fitted with valves that must remain closed during periods of rainfall and when the facility is unattended.
- E. The ground surface surrounding the pits must be graded such that all surfaces slope away from the pit to prevent surface flow stormwater from entering.
- F. The liner systems must be installed and maintained in accordance with best management and sound engineering practices.
- G. Each pit must be emptied and visually inspected **annually** for deterioration and leaks. A record of each inspection and photographs of the interior of each pit must be maintained for the life of the pit and must be submitted to Technical Permitting in Austin as part of the **Quarterly Report** required in Permit Condition I.T. The Kilgore District Office must be notified by phone or email at least 48 hours before emptying the pit for inspection. The permittee must maintain a record of when each pit is inspected and the results of the inspection. This record must be maintained by the permittee for the life of the pit.
- H. The liner systems must be inspected whenever evidence of a liner leakage arises. If inspection of the liner reveals cracking, a leak or other loss of integrity, the pit must have all waste immediately removed. No waste may be added to the affected pit until the liner has been replaced or repaired and re-inspected by RRC personnel before resuming use of the pit.
- I. This permit does not authorize discharge of waste from the pits to the land surface or surface water.
- J. Unless otherwise required by conditions of this permit, construction, use, and maintenance of each pit must be in accordance with the information represented on the applications (Form H-11's) and attachments thereto.
- K. COLLECTING/WASHOUT PIT (P012803A)
  1. The general layout and arrangement of the Collecting/Washout Pit (**P012803A**) must be consistent with the "*PIT #1 – RECEIVING/WASHOUT*" diagram, received on May

7, 2019, and the "*CROSS SECTIONS, PIT #1 – RECEIVING/WASHOUT*" diagram, received on May 30, 2019, which are attached as **Permit Appendix B**.

2. Use of the pit is limited to the collection of rinsate and residual solids from the washout of trucks and frac tanks and non-hazardous oil and gas wastes as specified in Permit Condition II. No other oil field fluids or oil and gas wastes may be stored or staged in the pit.
3. At least two (2) feet of freeboard must be maintained between the fluid level in the pit and the top of the pit walls
4. The pit must be no greater than 90 feet by 45 feet by nine (9) feet deep, with a permitted usable capacity not to exceed 658 bbl of waste.
5. The pit must be constructed in accordance with the liner system installation methods included in the application and consist of epoxy coated, reinforced concrete at least 10 inches thick, underlain with a 40-mil high density polyethylene (HDPE) liner. A concrete rollover curb at least two (2) feet in height must be installed and maintained at the entrance of the pit to prevent on flow of surface flow stormwater. The concrete liner must be installed and maintained in accordance with best management and sound engineering practices.
6. The pit must be sloped to drain fluids to the outflow pipe at the low point of the pit.
7. Solid waste that accumulates at the bottom of the pit must be removed regularly to maintain freeboard.

L. COLLECTING/SEPARATION PIT (P012803B)

1. The general layout and arrangement of the Collecting/Separation Pit (**P012803B**) must be consistent with the "*PIT #2 – LIQUID/SOLID SEPARATION & SOLIDS STORAGE*" and the "*CROSS SECTIONS, PIT #2A – LIQUID/SOLID SEPARATION*" diagrams, received on May 7, 2019, which are attached as **Permit Appendix C**.
2. Use of the pit is limited to the collection of non-hazardous oil and gas wastes as specified in Permit Condition II. No other oil field fluids or oil and gas wastes may be stored or staged in the pit.
3. At least two (2) feet of freeboard must be maintained between the fluid level in the pit and the top of the pit walls
4. The pit must be no greater than 7.5 feet by 45 feet by four (4) feet deep, with a permitted usable capacity not to exceed 100 bbl of waste.
5. The pit must be constructed in accordance with the liner system installation methods included in the application and consist of epoxy coated, reinforced concrete at least 10 inches thick at the pit walls and 12 inches thick at the pit floor, underlain with a 40-mil high density polyethylene (HDPE) liner. The concrete liner must be installed and maintained in accordance with best management and sound engineering practices.
6. The pit must be sloped to drain fluids to the outflow pipe at the low point of the pit.
7. Solid waste that accumulates at the bottom of the pit must be removed regularly to maintain freeboard.

**M. COLLECTING/DRYING PIT (P012803C)**

1. The general layout and arrangement of the Collecting/Drying Pit (**P012803C**) must be consistent with the "*PIT #2 – LIQUID/SOLID SEPARATION & SOLIDS STORAGE*" diagram provided in **Permit Appendix C**, and the "*CROSS SECTIONS, PIT #2B – SOLIDS RECEIVING, MIXING, STORAGE & LOADING*" diagram, received on May 7, 2019, which is attached as **Permit Appendix D**.
2. Use of the pit is limited to the collection of non-hazardous oil and gas wastes as specified in Permit Condition II for processing and stabilization of solid wastes prior to offsite disposal at a RRC permitted facility. No other oil field fluids or oil and gas wastes may be stored or staged in the pit.
3. The pit must be no greater than 81.5 feet by 45 feet by four (4) feet deep, with a permitted usable capacity not to exceed 1,090 bbl of waste.
4. The pit must be constructed in accordance with the liner system installation methods included in the application and consist of epoxy coated, reinforced concrete at least 10 inches thick at the pit walls and 12 inches thick at the pit floor, underlain with a 40-mil high density polyethylene (HDPE) liner. A concrete rollover curb at least two (2) feet in height must be installed and maintained at the entrance of the pit to prevent on flow of surface flow stormwater. The concrete liner must be installed and maintained in accordance with best management and sound engineering practices.
5. The pit must be sloped to drain fluids to the low point of the pit. Accumulation of free liquids in the pit is not authorized.
6. A buffer of two (2) feet must be maintained between the bottom edge of the staged waste in the pit and the two of the surrounding concrete retaining walls. A buffer of five (5) feet must be maintained between the bottom edge of the staged waste in the pit and the entrance ramp.

**N. COLLECTING/MIXING PIT (P012803D)**

1. The general layout and arrangement of the Collecting/Separation Pit (**P012803D**) must be consistent with the "*PIT #3 MIXING*" diagram, received on May 30, 2019 and the "*CROSS SECTIONS, PIT #3 – MIXING*" diagram, received on May 7, 2019, which are attached as **Permit Appendix E**.
2. Use of the pit is limited to the collection of non-hazardous oil and gas wastes as specified in Permit Condition II. No other oil field fluids or oil and gas wastes may be stored or staged in the pit.
3. The pit must be no greater than 70 feet by 12 feet by four (5) feet deep, with a 500-bbl frac tank that must be staged within the concrete structure at all times. The permitted usable capacity must not exceed 500 bbl of waste.
4. At least two (2) feet of freeboard must be maintained between the fluid level in the frac tank and the top of the frac tank walls
5. The concrete pad that stages the 500-bbl frac tank must be constructed in accordance with the liner system installation methods included in the application and consist of reinforced concrete at least 10 inches thick at the pit walls and 12 inches thick at the pit floor, underlain with a 40-mil high density polyethylene (HDPE) liner. The concrete liner must be installed and maintained in accordance with best management and sound engineering practices.

6. The pit must be sloped to drain fluids to the low point of the pit.
7. Solid waste that accumulates at the bottom of the pit must be removed regularly to maintain freeboard.

## VI. GROUNDWATER MONITORING

- A. At least one (1) test boring must be drilled, as specified in Permit condition VI.B., at location SB-3, as identified on the "*SOIL BORING LOCATION MAP*" provided in **Permit Appendix A**. If groundwater is encountered in the test boring, all three (3) borings must be drilled and completed as groundwater monitoring wells, as specified in Permit Conditions VI.B. and VI.C.
- B. Provide the soil boring lithological logs for each boring continuous to the capillary fringe. All borings must remain open at least 24 hours to determine the direction of groundwater flow. Each boring log must be certified by a Texas licensed Professional Engineer (P.E.) or Professional Geoscientist (P.G.) and the following must be submitted to Technical Permitting:
  1. Soil classification under the Unified Soil Classification System (USCS) for the full extent of the soil borings to the capillary fringe or to the identified depth to water
  2. Soil samples as necessary at depths where a distinct lithological change is identified
  3. If groundwater is encountered in the test boring, a potentiometric surface map showing static water levels and the estimated groundwater flow direction and the calculated groundwater flow gradient
  4. Collected soil samples must undergo a grain size distribution analysis utilizing the American Society for Testing and Materials (ASTM) Method D 422 or equivalent including Liquid Limit/Plasticity Index Analysis (ASTM D 4318) or equivalent; and
  5. The geotechnical laboratory reports and corresponding chain of custody for the grain size distribution analysis and the Atterberg Limit(s) testing conducted
- C. If groundwater is encountered in the test boring, at least three (3) groundwater monitor wells must be installed, maintained and routinely sampled at the facility. The monitor wells are to be installed at the locations designated on the "*SOIL BORING LOCATION MAP*" provided in **Permit Appendix A**. The following provisions must be met:
  1. The wells must be completed by a certified water well driller in accordance with 16 TAC Part 4, Chapter 76 (Water Well Drillers and Water Well Pump Installers).
  2. The wells must be completed to penetrate the shallowest groundwater zone, and the completion must isolate that zone from any deeper groundwater zone.
  3. The screened interval of the wells must be designed to intercept at least five feet of groundwater.
  4. Provisions must be made to protect the well heads from damage by vehicles and heavy equipment.
  5. The wells must be maintained in good condition with a lockable watertight expansion cap.

6. The following information must be submitted after the new wells are completed:
  - a. A soil boring lithological log for the well, with the soils described using the Unified Soil Classification System (USCS) (equivalent to ASTM D 2487 and ASTM D 2488). The log must also include the method of drilling, well specifications, slotted screen type and slot size, riser and screen length, bentonite and cement intervals, total depth, and the depth of the first encountered groundwater or saturated soils. The sand pack size should be compatible with the well screen slot size, as well as the local lithology.
  - b. A well installation diagram detailing construction specification for each well
  - c. A survey elevation for each well head reference point (top of casing) relative to a real or arbitrary on-site benchmark relative to mean sea level
  - d. A table with recorded depth to water, top of casing, and adjusted depth to water data
  - e. An updated Site Plan and a potentiometric surface map showing static water levels, the calculated gradient, and the estimated direction of groundwater flow
7. All monitor wells must be monitored and/or sampled for the following parameters after installation, and quarterly thereafter:

<u>PARAMETER</u>	<u>UNITS</u>
Static Water Level	Feet (ft)
Total Depth	ft
pH <i>EPA Method 150.1, 150.2, or equivalent</i>	s.u.
Total Dissolved Solids (TDS) <i>EPA Method 2540C or equivalent</i>	mg/L
Total Petroleum Hydrocarbon (TPH) <i>Method TX1005</i>	mg/L
Benzene <i>EPA Method 602 or equivalent</i>	mg/L
Soluble Cations: Calcium, Magnesium, Potassium, and Sodium <i>EPA Method 6010/6020 or equivalent</i>	mg/L
Soluble Anions: Bromides, Carbonates, Chlorides, Nitrates, and Sulfates <i>EPA Method 300/9056 or equivalent</i>	mg/L

8. Copies of the monitoring-well gauging and sampling event data must be filed quarterly with Technical Permitting and the Kilgore District Office as part of the **Quarterly Report** required in Permit Condition I.T. The laboratory analytical reports and the corresponding chain of custody must be provided for all chemical analyses performed.

## **VII. STORMWATER MANAGEMENT**

- A. The facility must be designed and constructed to capture, contain, and isolate contact stormwater, and prevent run-on of non-contact stormwater.
- B. Berms and other containment structures must be constructed around all waste management units and storage areas. These structures must be used to divert non-contact stormwater around the waste management areas and isolate and contain contact stormwater within the waste management units.
- C. All storage tanks containing fluid waste or fuel must be contained within dikes. Secondary containment of 120% total storage capacity is recommended, however a firewall with capacity that will capture 100% of the volume of the largest tank plus the volume of a 25-year, 24-hour rainfall event for Harrison County is acceptable.
- D. Contact stormwater must be prevented from migrating outside of the waste processing and storage areas. The facility must be sloped to facilitate the separation of contact and non-contact stormwater.
- E. Contact stormwater must be collected within 24 hours of accessibility and disposed of in an authorized manner.
- F. A discharge permit from the EPA may be required for non-contact stormwater discharges. If required, the permit from the EPA must be in place prior to commencement of discharge operations.

## **VIII. FACILITY CLOSURE**

- A. Technical Permitting and the appropriate District Office must be notified in writing at least 45 days prior to commencement of all facility closure activities. Technical Permitting must be notified if any changes will be made to the closure plan.
- B. Unless otherwise specified by this permit, all waste, chemicals, and waste-related materials must be processed and removed from the facility and disposed of in an authorized manner.
- C. All processing equipment, above-ground storage tanks, and any other non-maintenance related equipment must be cleaned and removed from the facility. The contents of all tanks, vessels, pits, or other containers must be disposed of in an authorized manner.
- D. All concrete pads must be steam cleaned and demolished and the rubble, secondary liners and wash water disposed of in an authorized manner.
- E. Affected soils underlying the concrete pads must be removed and disposed of in an authorized manner.
- F. Closure of the pits must proceed as follows:
  - 1. The pits must be dewatered, emptied, demolished, backfilled, compacted, and properly closed. All wastes, including clay or synthetic liners, must be removed and disposed of in an authorized manner.
  - 2. The concrete areas, pits, concrete pads, washout bays and access roads must be cleaned and demolished, and the concrete rubble and wash-water must be disposed of in an authorized manner. All visually contaminated soils must be excavated and removed. The contaminated soil must be disposed of in an authorized manner.

3. Once waste removal is completed, a soil sampling plan must be submitted to Technical Permitting to characterize the scope of contamination (if any) at the facility. After the removal of wastes, composite soil samples must be taken comprised of a minimum of four representative soil samples per former pit location, and five representative soil samples per acre. Samples must be taken from around and underneath the pit areas.
  4. Soil samples must be analyzed for the parameters listed in Permit Condition VIII.G., and the specified limitations must not be exceeded.
  5. Any soil sample that exceeds the parameter limitations specified in Permit Condition VIII.G. is considered waste and must be disposed of at an authorized disposal facility.
- G. Soil samples must be analyzed for the following parameters and may not exceed the specified limitations:

<u>PARAMETER</u>	<u>LIMITATION</u>
pH <i>EPA Method 9045C</i>	6 to 10 standard units
Electrical Conductivity (EC) <i>Louisiana Dept. of Natural Resources Lab Procedures for Analysis of Exploration &amp; Production Waste or equivalent</i>	≤ 4.0 mmhos/cm
Total Petroleum Hydrocarbons (TPH) <i>Method 5035A / TX1005</i>	≤ 10,000 mg/kg or 1% by weight
Total Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) <i>EPA Method 5035A / 8021/8260B</i>	≤ 30 mg/kg
Metals (Total) <i>EPA Method 6010/6020/7471A</i>	
Arsenic	≤ 10 mg/kg
Barium	≤ 10,000 mg/kg
Cadmium	≤ 10 mg/kg
Chromium	≤ 100 mg/kg
Lead	≤ 200 mg/kg
Mercury	≤ 10 mg/kg
Selenium	≤ 10 mg/kg
Silver	≤ 200 mg/kg

- H. A summary of the soil sampling must include:
1. A map drawn to scale with coordinates of the sampling locations
  2. A table indicating the results of the parameters sampled
  3. The date of sampling
  4. The approximate depth of the sample below land surface
  5. Copies of the laboratory analytical reports and chain of custody

- I. Once the results of the closure activities have been approved by the RRC, all pits must be dewatered, emptied, demolished, backfilled, and compacted within 120 days of final cessation of use of each pit. Final surface grading of the pits and the storage tank battery areas must be accomplished in such a manner that rainfall will not collect at these former locations. Upon final closure, the appropriate District Office and Technical Permitting in Austin must be notified in writing.

This authorization is granted subject to review and cancellation should investigation show that such authorization is being abused.

APPROVED AND ISSUED ON July 30, 2019



Tiffany Humberson, Manager  
Environmental Permits & Support  
Technical Permitting

Attachments: Appendix A through D

CC: RRC DISTRICT 06, KILGORE  
P-5 DEPARTMENT

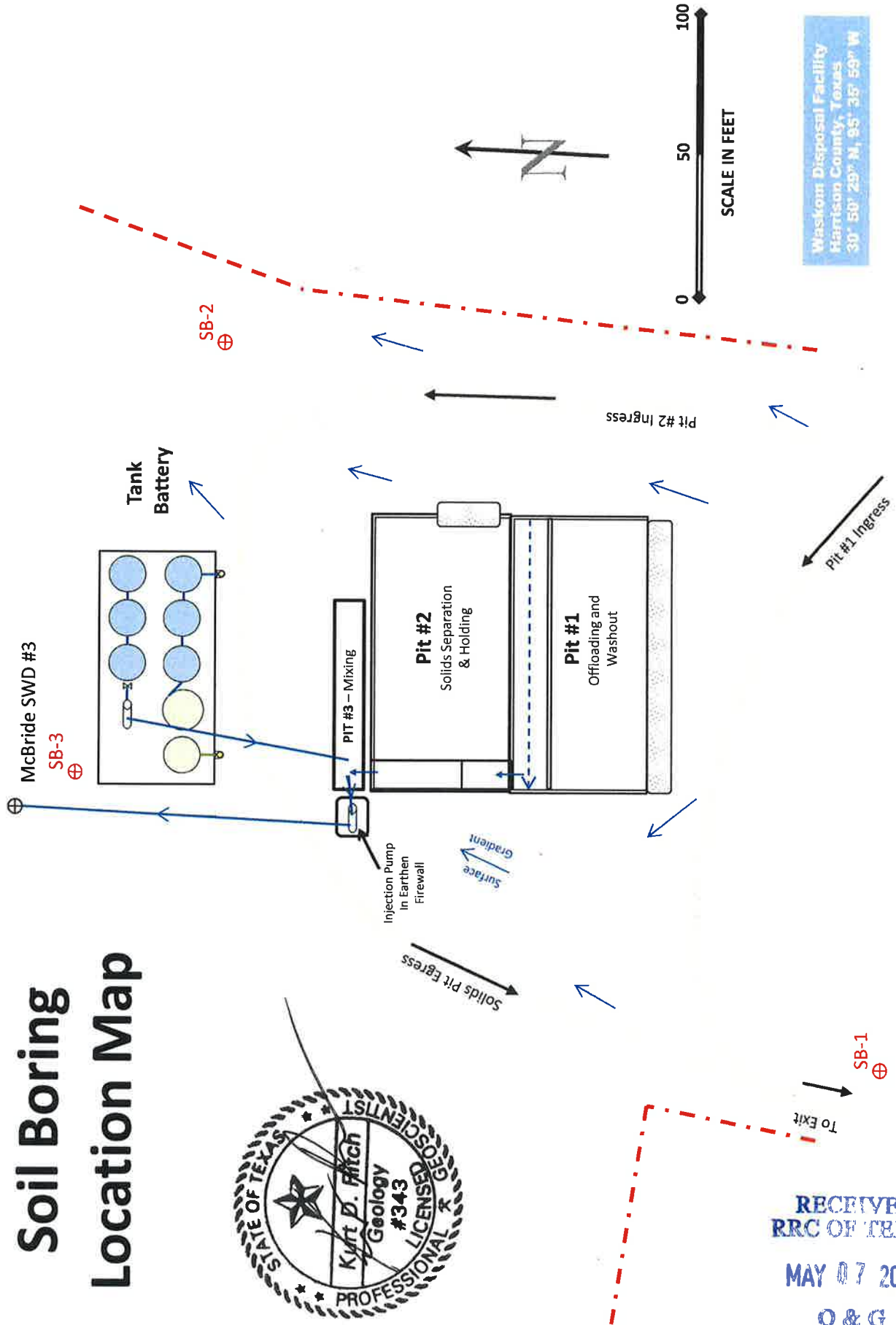


# **Permit Appendix A**

SOIL BORING LOCATION MAP

FACILITY CROSS SECTION

# Soil Boring Location Map



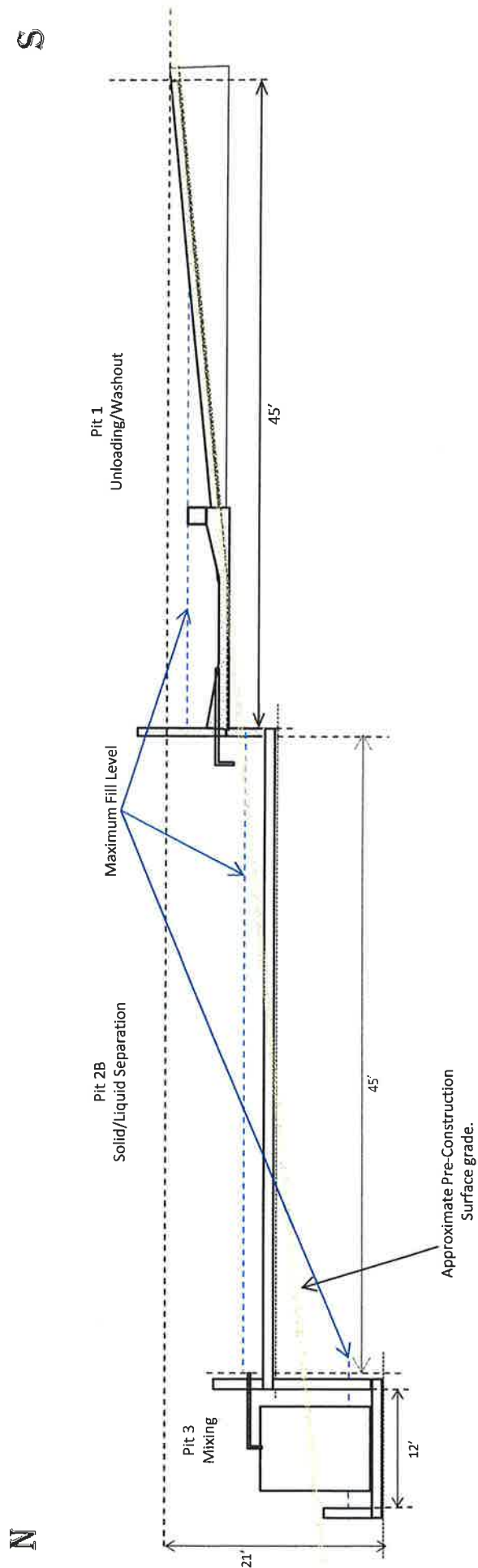
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AUSTIN, TX

# Facility Cross Section

View to the East



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*W. J. [Signature]*  
4-29-19

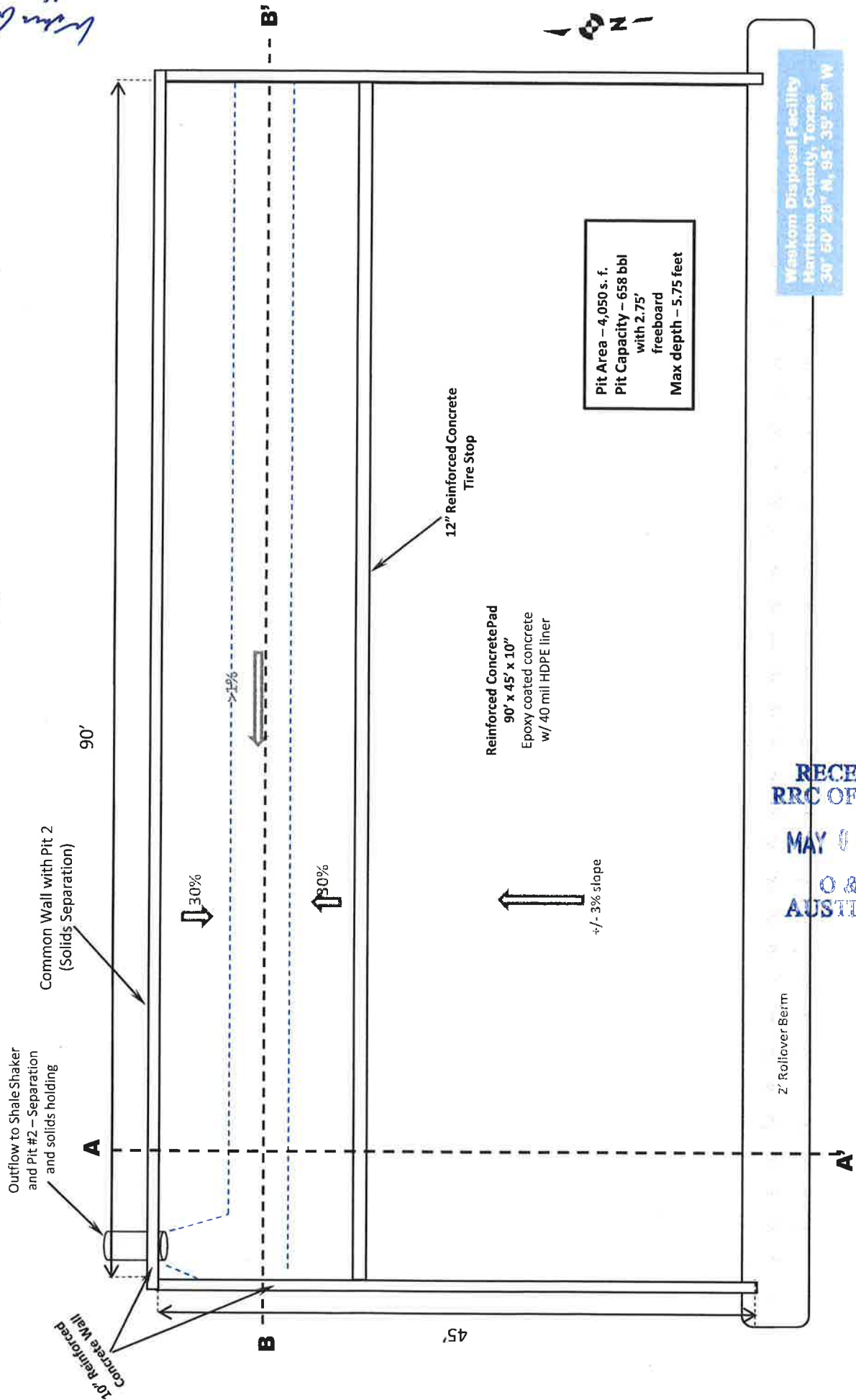
## **Permit Appendix B**

PIT #1 – RECEIVING/WASHOUT

CROSS SECTIONS, PIT #1 – RECEIVING/WASHOUT

# Pit #1 – Receiving/Washout

4-24-19  
W. C. [Signature]

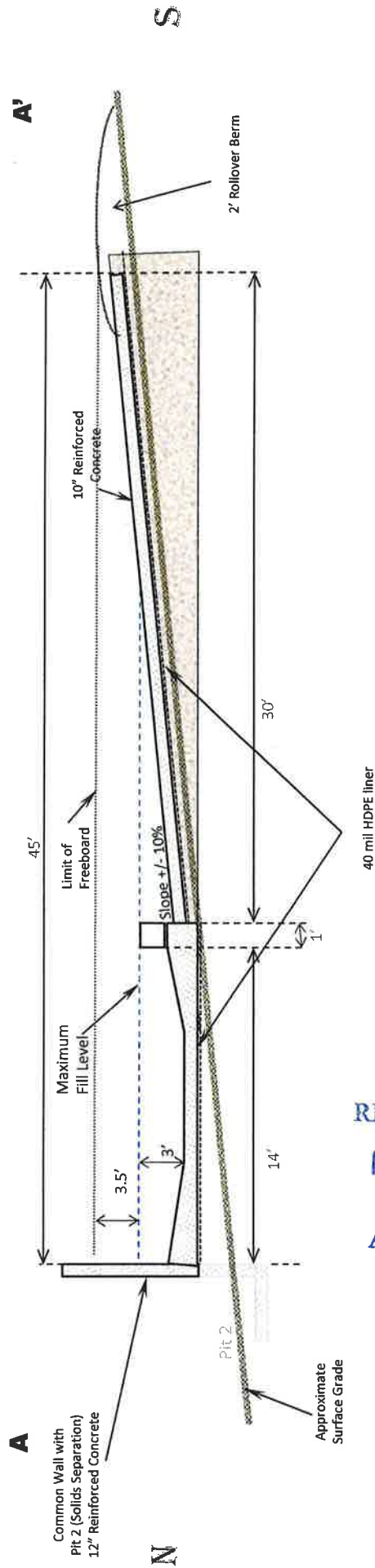
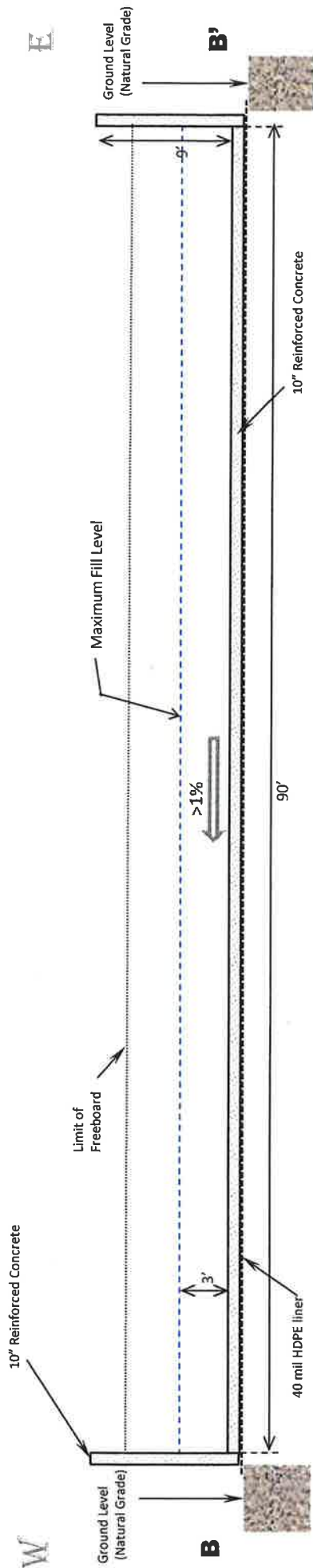


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AUSTIN, TX

Wascom Disposal Facility  
Harrison County, Texas  
30° 50' 28" N, 95° 35' 59" W

# Cross Sections

## Pit #1 – Receiving / Washout



Waskom Disposal Facility  
Harrison County, Texas  
30° 50' 28" N, 95° 35' 59" W

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AUSTIN, TX

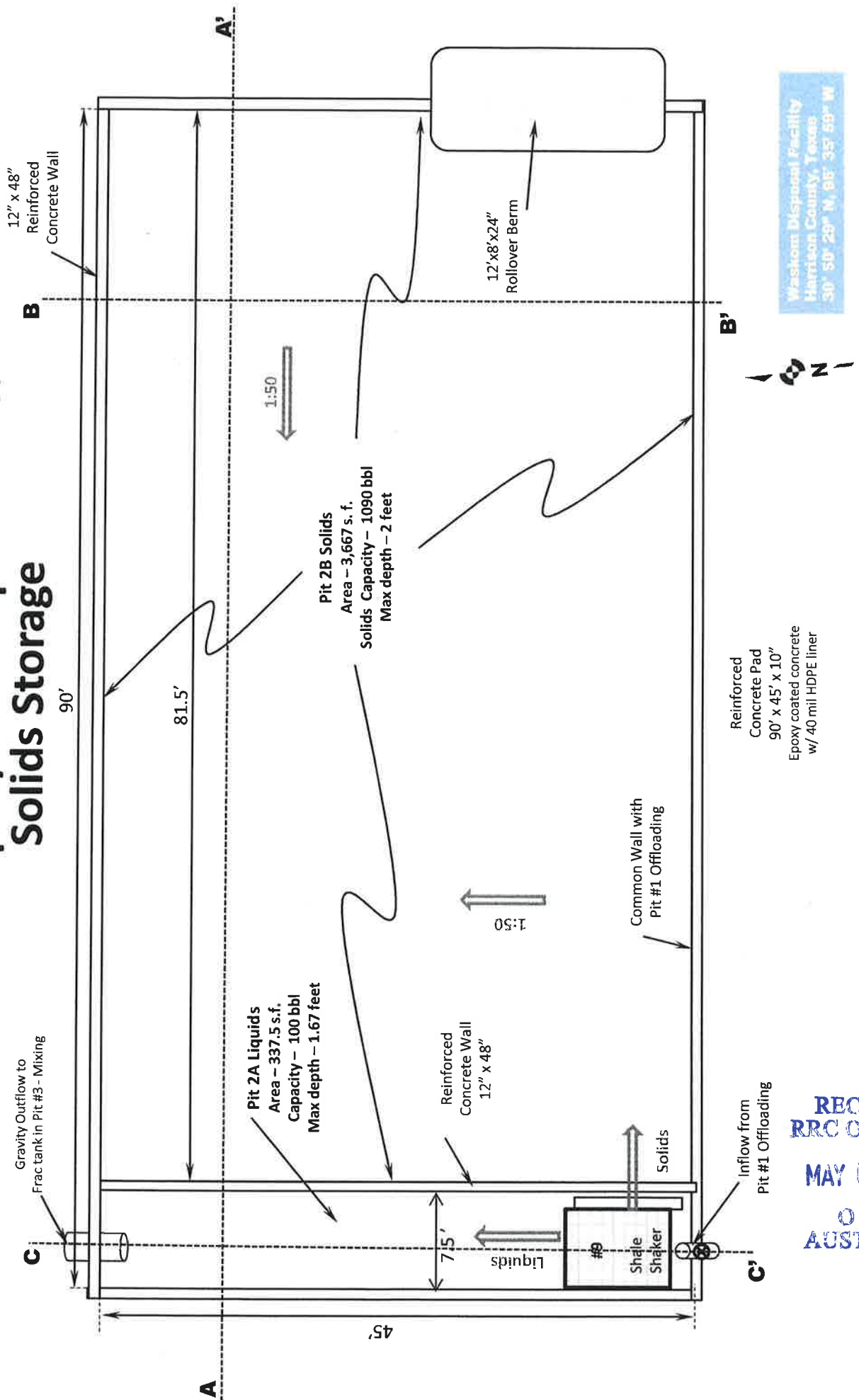
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5-24-19

## **Permit Appendix C**

PIT #2 LIQUID/SOLID SEPARATION & SOLIDS STORAGE

CROSS SECTIONS, PIT #2A – LIQUID/SOLID SEPARATION

# Pit #2 Liquid/Solid Separation & Solids Storage



Waskom Disposal Facility  
Harrison County, Texas  
30° 50' 28" N, 96° 35' 59" W

*W. L. Smith*  
4-29-19

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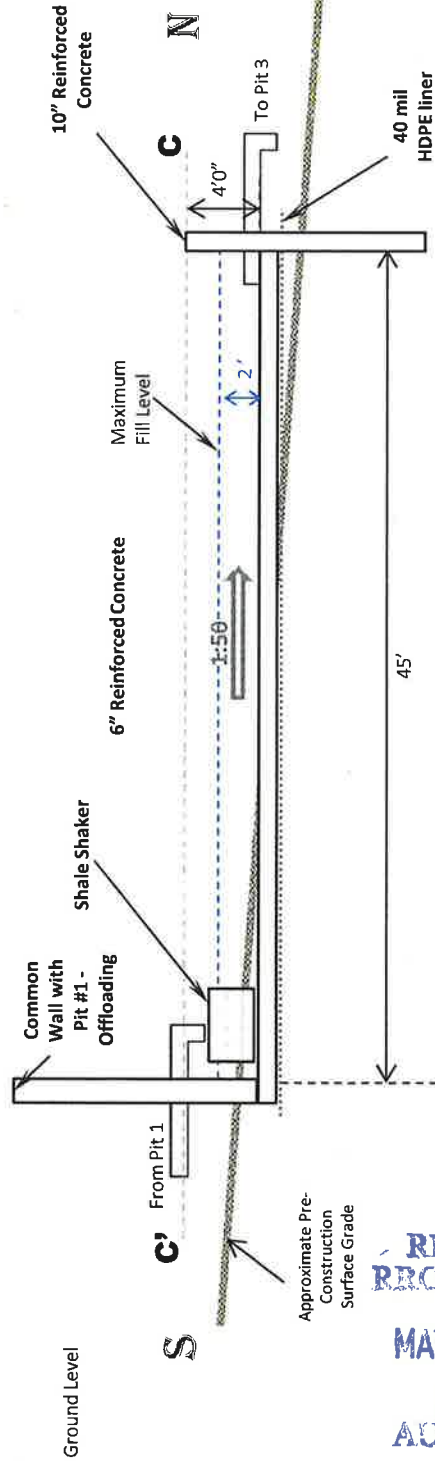
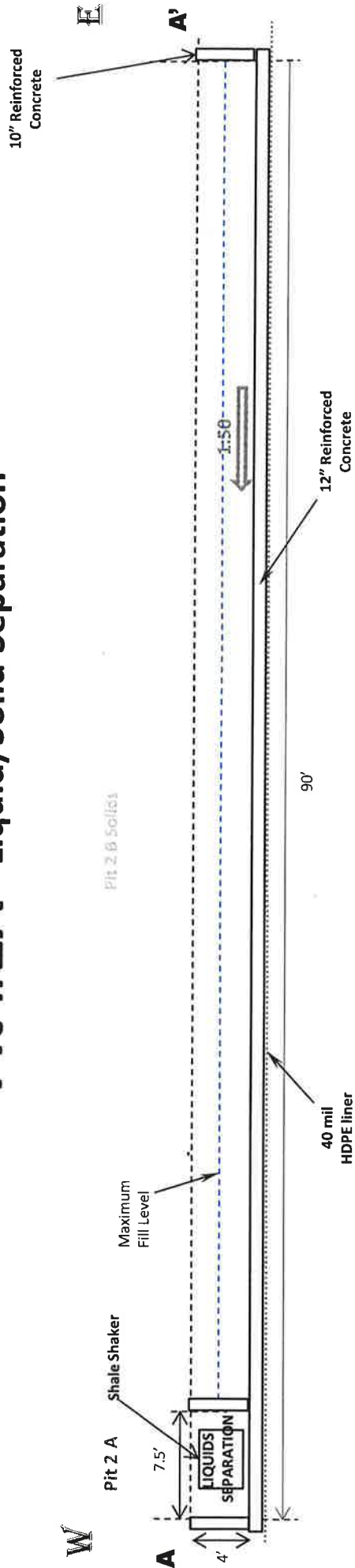
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AUSTIN, TX



# Cross Sections

## Pit #2A- Liquid/Solid Separation



Waskom Disposal Facility  
Harrison County, Texas  
30° 50' 28" N, 95° 35' 59" W

*Waskom*  
4-29-19

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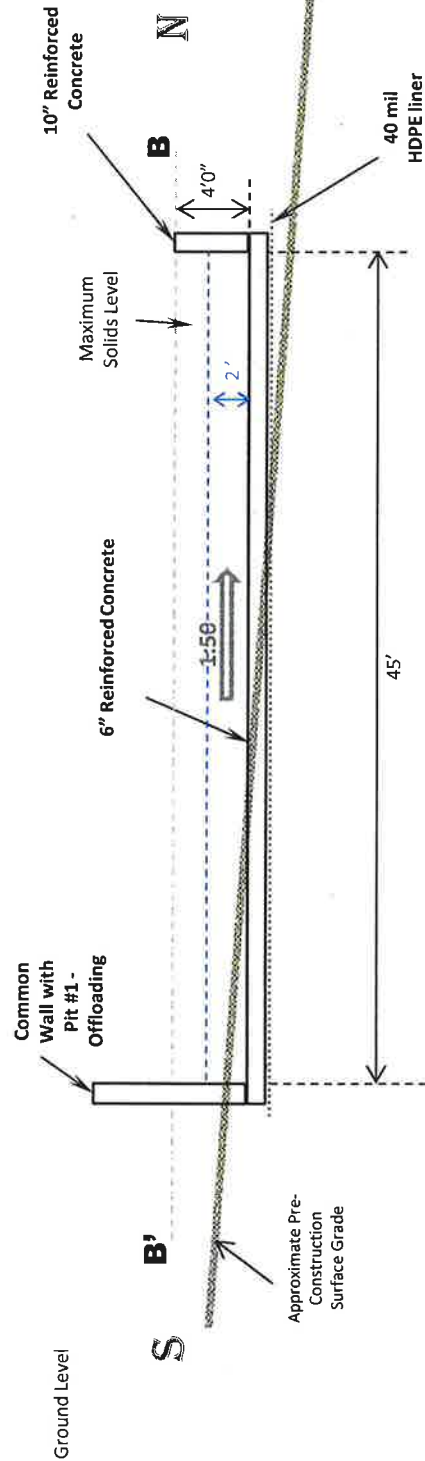
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## **Permit Appendix D**

PIT #2B – SOLIDS RECEIVING, MIXING, STORAGE & LOADING

## Pit #2B- Solids Receiving, Mixing, Storage & Loading



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Wendy Dand  
4-29-19

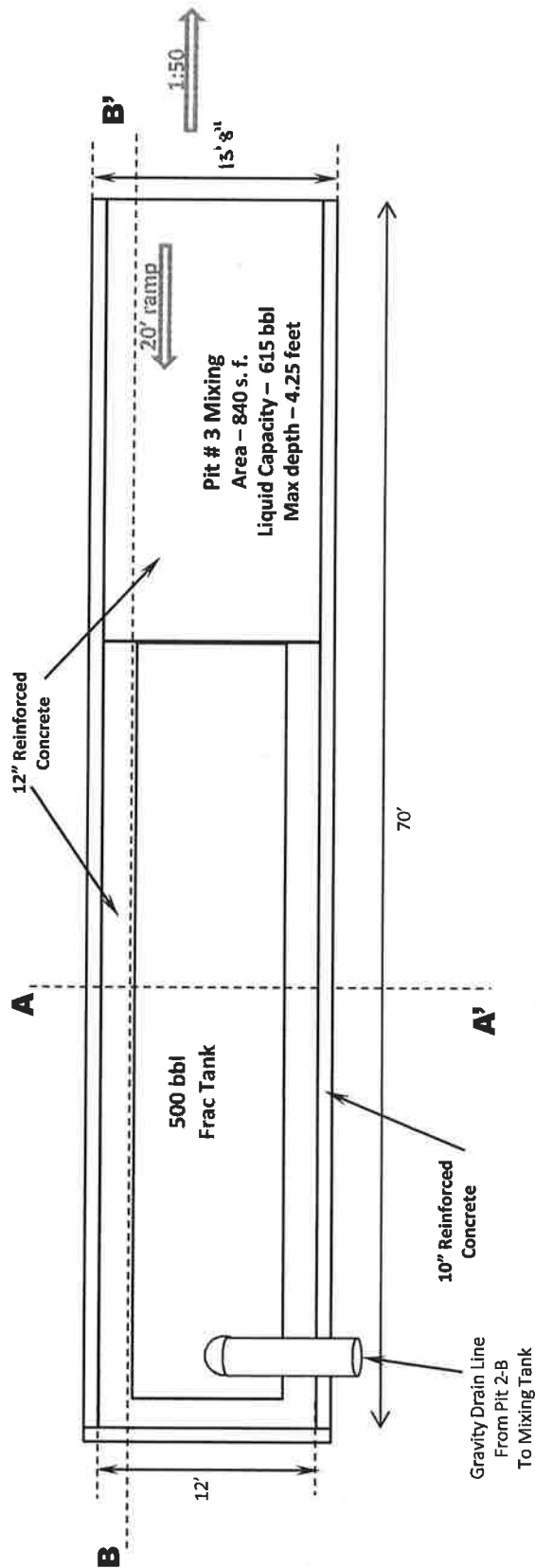
## **Permit Appendix E**

PIT #3, MIXING

CROSS SECTIONS, PIT #3 – MIXING

# Pit # 3 Mixing

Gravity Inflow from  
Pit #2 - Separation



Waskom Disposal Facility  
Harrison County, Texas  
30° 50' 28" N, 95° 35' 58" W

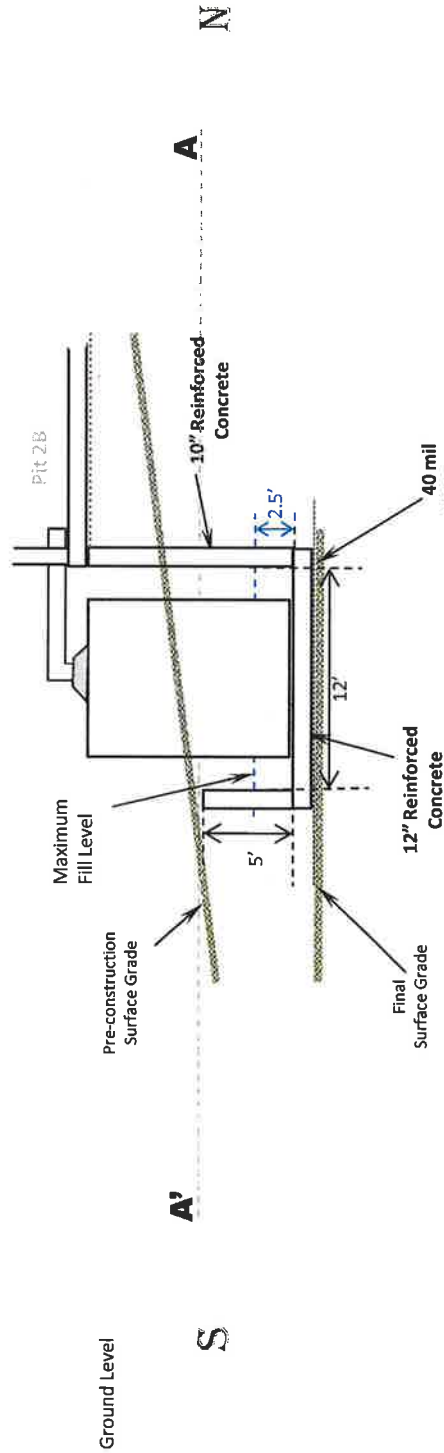
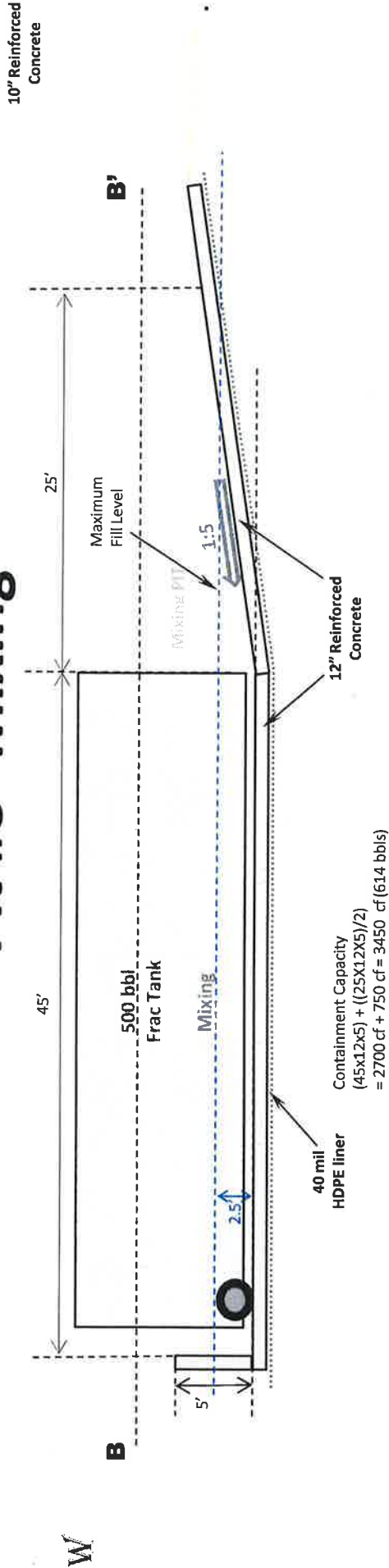
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MAY 30 2019

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AUSTIN, TX

*Waskom*  
5-24-19

# Cross Sections Pit #3- Mixing



Waskom Disposal Facility  
Harrison County, Texas  
30° 50' 29" N, 95° 35' 59" W

RECEIVED  
RRC OF TEXAS

MAY 07 2019

O & G  
AUSTIN, TX

*Wendy Davis*  
4-24-19